

**Ambassador Linton Brooks**  
**Industry and Government in the Service of Nonproliferation**  
**U.S. Industry Coalition**  
**November 14, 2002**

Thank you Vic and good morning. It is an honor to be here with such an impressive and diverse group. I want to tell you how much Secretary Abraham regrets that last-minute changes to his schedule prevented his coming here today. The Secretary asked me to tell you that he has an enormous amount of respect for the work USIC is doing. That work is particularly important now. Think of the past year, or even the past few weeks:

- September 11
- October anthrax attacks
- Moscow theatre hostages
- Revelations of N. Korean nuclear weapons program
- Iraq

These events remind us both that we live in unsettling times and of the responsibilities we must accept if the 21<sup>st</sup> Century is to be a period of peace and prosperity. The Secretary and I are responsible for the United States' nuclear weapons program and are stewards of DOE's world-class national laboratories. We take the emerging challenges of terrorism and proliferation personally.

The U.S. Government, and in particular, the Department of Energy cannot and must not permit weapons of mass destruction expertise to spread to dangerous nations or to terrorist groups. If we fail, it could lead to devastation well beyond the horrors we have experienced and witnessed so recently. The President, the Secretary, and I take this challenge very seriously.

Our strategy to prevent any the spread of weapons of mass destruction – especially nuclear weapons – has several parts. First, is control of materials. We seek to stop making nuclear material, to consolidate what material exists, to protect the material, and, ultimately, to eliminate it. Since last September, we have broadened our efforts to include radiological materials as well. Only yesterday the Secretary and the Director General of the International Atomic Energy Agency announced the dates for a major international conference on radiological dispersal devices, following up on a proposal Secretary Abraham made at the recent IAEA General Conference. Improving the physical security of nuclear materials is very important and we take it very seriously.

But there is another, equally important component of our strategy: our programs to prevent a “brain drain” of weapons expertise. One might think of this as “intellectual security.” Just as we must prevent dangerous materials from leaving Russia, so too must we contain dangerous knowledge. We must make it possible for those who once made weapons of mass destruction in the former Soviet Union to earn a decent and honorable

living through work on peaceful ventures that benefit, enrich and add to life. The alternative, sooner or later, is to find their expertise in the service of the outlaw states or terrorists gangs of the world.

There is an important difference between intellectual and physical security that makes the task of containing knowledge all the more challenging. Physical security lends itself to measurable, clearly defined metrics – so many tons of material made more secure, so many facilities better protected from sabotage, or theft. Success is measurable and can come on a predictable schedule.

Intellectual security does not have that luxury. It is not a task that will end in a year, five years, or ten years. The threats and temptations will not go away. It is an “enduring” task that is complicated, time-consuming, and can only be speeded up so much. Indeed, the task requires a transformation of Russian society. That is a task that ultimately must be done by the Russians themselves, but they cannot do it without our help and the help of other advanced economies.

The Secretary and I are proud that the Department of Energy and, more recently, the National Nuclear Security Administration, have played such a significant role in countering the brain drain, a role that dates from the beginning of the post Soviet era. DOE partnered with the Department of State in establishing the international science centers, and established two important programs under NNSA: Initiatives for Proliferation Prevention and the Nuclear Cities Initiative. As you know, as a result of last year’s administration review, the President directed that we consolidate these efforts into a single Russian Transition Initiative. All three of those words are significant. Russia – because, while the work USIC is doing in other countries is important, Russia remains key. Transition – because we seek to transform – or help transform – the Russia nuclear weapons sector. And Initiative – because we have the harness the creativity of America, most of which resides outside government, with you. We hope this consolidation will improve efficiency and gain the benefits of synergy.

These programs are important. But I am under no illusions: governments alone don’t create wealth and transform economies. Thus the United States has been extremely fortunate to have the support and partnership of the United States Industry Coalition. Over 140 companies and institutions are USIC members – in fact, I know of no other organization that reflects the varied business interests of corporate America so well or that has been as effective in countering intellectual proliferation.

Our collaborative efforts are unique and unprecedented. You bring together Russian scientists, U.S. scientists, the DOE labs, U.S. industry, the United States government and the Russian government in a unique alliance that is making long-term contributions to national security. This partnership has begun to create hundreds of new jobs for those scientists who had no hope only a year or so ago. You are now well on the way to going from hundreds to thousands of new jobs both here and in Russia.

There is a direct, immediate non-proliferation benefit to your efforts. But in the long run, those jobs, while important, are only a temporary solution. Ultimately, preventing intellectual proliferation requires transforming the former Soviet weapons complex in a way that will bring prosperity to former weapons scientists and engineers. We should not be surprised that U.S. government has turned to its own engine of economic growth – corporate and entrepreneurial America – for the solution to this problem. After all, you are the source of America’s prosperity.

As the President and the Administration recognize, Russia is committed to improving itself, and the United States is committed to helping Russia succeed in doing so. Russia will choose its own future; all we can do is help it to choose the right one, a future based on a market economy, on democracy, and on responsible international behavior. That’s a broad foreign policy agenda, but it becomes meaningful through the myriad individual steps that are taken to support it. USIC is taking some of those steps.

You are helping to create an atmosphere of commerce and innovation, important stepping-stones on the path to a robust democracy.

You are helping to create an entrepreneurial spirit in Russia – for democracy is forged cumulatively through dynamic, relatively small business endeavors that together, create an economy of ideas, innovation, and opportunity.

You are helping Russia overcome the legacy of secrecy that results in anachronisms like “closed cities,” by showing Russian leaders the practical benefits of international technology cooperation.

Working with the government, you are working for the day when government involvement is no longer required. When that day comes, business will invest in Russia because a skilled labor force and a transformed Russian economic and legal system make it attractive to do so. And when that day comes, we will have come as close as we ever can to having solved the brain drain problem. Russians love their country as much as we love ours, and when they can prosper there, we will not need to worry about the Iraqs and Al Quadas of the world succeeding in their efforts to recruit these scientists.

That is why your leadership, your conviction, and your involvement are so important. The Secretary and I salute you for your efforts. We are delighted that DOE and its national laboratories have been party to this great effort.

If you were “only “ spearheading this country’s efforts to forge a long-term solution to the problem of intellectual “leakage” from the former Soviet Union, that would be a great accomplishment. But USIC is doing more. You are creating new wealth – not only for the United States, but also for the countries in which you are engaged. Think of the breadth, and span of the work that you have done:

- a new proliferation-resistance nuclear fuel will make it possible to generate future nuclear power with reduced spent fuel – spent fuel that cannot be profitably reprocessed for nuclear weapons material.
- You are developing new processes for soil remediation and heavy metals clean-up;
- USIC members are pursuing any number of critical biotech advances, such as the novel wheelchair seat cushion that prevents and even helps to heal pressure sores, or your projects focused on developing enzymes for the detection of anthrax.

I know these examples hardly skim the surface of your activities, but they well represent the diversity and importance of what you are accomplishing through this program. The quality of those efforts is illustrated by the three USIC members whose technologies were selected this year for the R&D100 Award – a prestigious honor that recognizes the most significant new products introduced into the market place over the past year. On behalf of the Secretary, the Department of Energy, and the National Nuclear Security Administration, I want to extend my congratulations to:

- Argonide Corporation for its nanosized ceramic fibers for virus/bacteria detection and removal from air and water. These remarkable fibers are likely to be used as key future tool to deal with a biological weapons threat, as well as for possible use for artificial bone compositions.
- Cyclotec Advanced Medical Industries for its miniaturized wireless pain relief devices. These low-cost, programmable devices will be available over the counter for treatment of acute and chronic conditions.
- Stolar Horizon for its Horizon Sensor and EDIT landmine detector. The Horizon Sensor will allow clean and efficient coal production, while the EDIT landmine detector, which can find hidden metallic and plastic landmines, will be a marvelous new tool to fight the scourge of millions of uncontrolled landmines.

The national lab partners on these R&D100 winners are National Renewable Energy Laboratory in Golden, Colorado; Lawrence Livermore National Laboratory in California; and Sandia National Laboratories in Albuquerque New Mexico and the Kansas City Plant in Missouri. All of us are proud of their contribution and we're proud to be associated with the R&D 100 winners.

For the rest of the day, you will be hearing a series of specific panels and presentations. You will become enmeshed in details. But I hope you will remember the fundamental importance of the effort in which we are all engaged. The world is a safer place, because of the work you do. On behalf of the Secretary, the President, and the country, I want to thank you for that work.

Thank you for your attention, and I'll be happy to answer questions.